

Listing of Claims

1. (Previously Amended) A light emitting diode comprising:
a surface mount package;
a metal lead frame having mass sufficient to provide low thermal resistance
including at least one anode contact pad and at least one cathode contact pad and
wherein the metal lead frame comprises three anode contact pads and one cathode
contact pad;
a reflector positioned within the package; and,
a semiconductor die comprising a transparent substrate and a light emitting
component, wherein the semiconductor die connects to the metal lead frame via at least
two solder bridges positioned within the package between an anode contact and a
cathode contact over the reflector.
2. (Original) The light emitting diode of claim 1 further comprising a focusing
dome operative to refract light emitted from the semiconductor die and light reflected
from the reflector to create a predetermined radiation pattern.
3. (Original) The light emitting diode of claim 2 wherein the radiation pattern
comprises a 120 degree illumination pattern.
4. (Original) The light emitting diode of claim 1 wherein the reflector comprises a
truncated cone shape.
5. (Cancelled)
6. (Original) The light emitting diode of claim 1 wherein the lead frame
comprises a lead frame having a thermal resistance less than 300 K°/W.
7. (Original) The light emitting diode of claim 1 wherein the lead frame
comprises copper.

8. (Original) The light emitting diode of claim 1 wherein the lead frame comprises silver-plated copper.

9. (Original) The light emitting diode of claim 1 wherein the light emitting component comprises a GaN based compound semiconductor and the substrate comprises sapphire.

10. (Original) The light emitting diode of claim 1 wherein the light emitting component comprises an AlInGaP compound semiconductor and the substrate comprises GaP.

11. (Original) The light emitting diode of claim 1 wherein the light emitting component and the substrate are arranged side-by-side over the reflector.

12. (Original) The light emitting diode of claim 1 wherein the substrate is positioned on top of the light emitting component over the reflector.

13. (New) The light emitting diode of claim 1 wherein the metal lead frame comprises three anode contact pads and one cathode contact pad.

14. (New) The light emitting diode of claim 1 having no wire bond attachment to said anode contact or cathode contact.